

Determine the Elements through Spectrum

Oct. 25
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In today's lab, we were using the tubes containing with different chemical substances, putting in a gadget that passes an electric current through them. Thus, we can determine the element that is produced through this color of light. Another thing we also used is called spectrometer, which is used for detecting and analyzing wavelengths of electromagnetic radiation.

Hence, the purpose of doing this experiment is help us to understand the elements that an Exostar contains, through the light it produces.

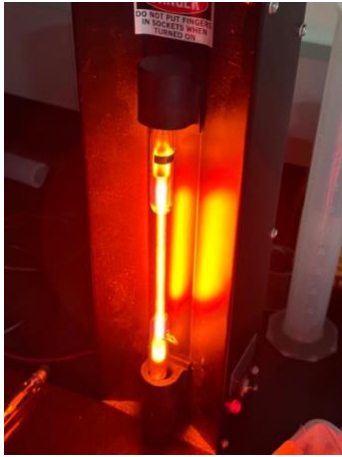
Spectroscopy: Analyzing these spectral lines helps astronomers identify the elements present in a star. By comparing these lines to known spectra of elements, they can determine the composition of the star's atmosphere.

For example, if a particular star's spectrum shows absorption lines characteristic of hydrogen and helium, astronomers can infer that these elements are present in that star.

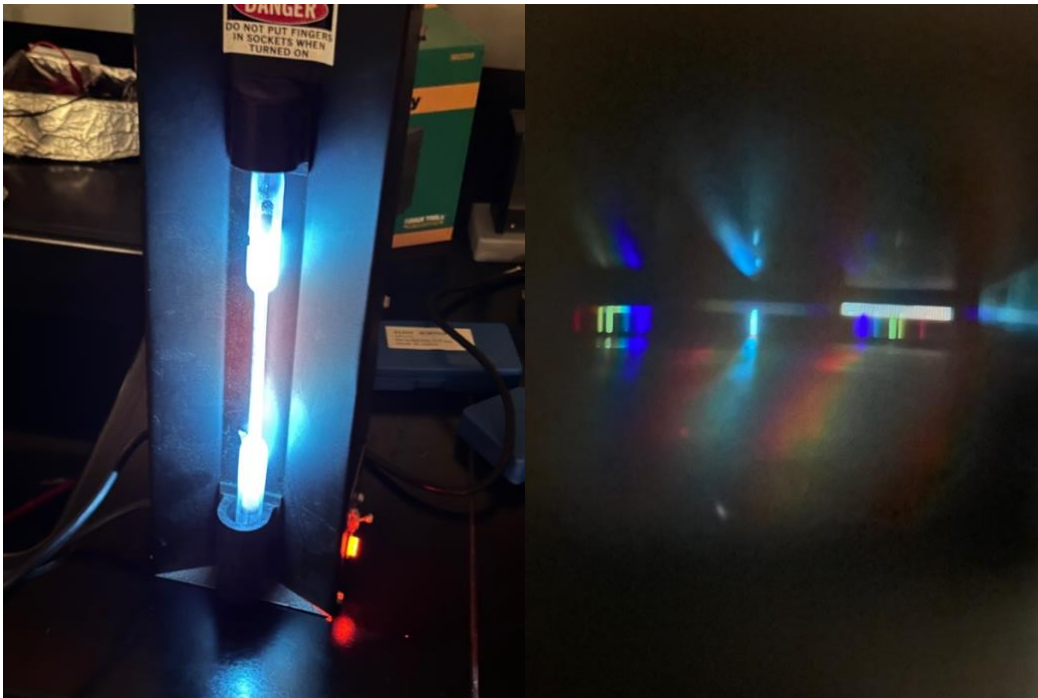


(spectrometer)

Neon (Reddish-Orange):



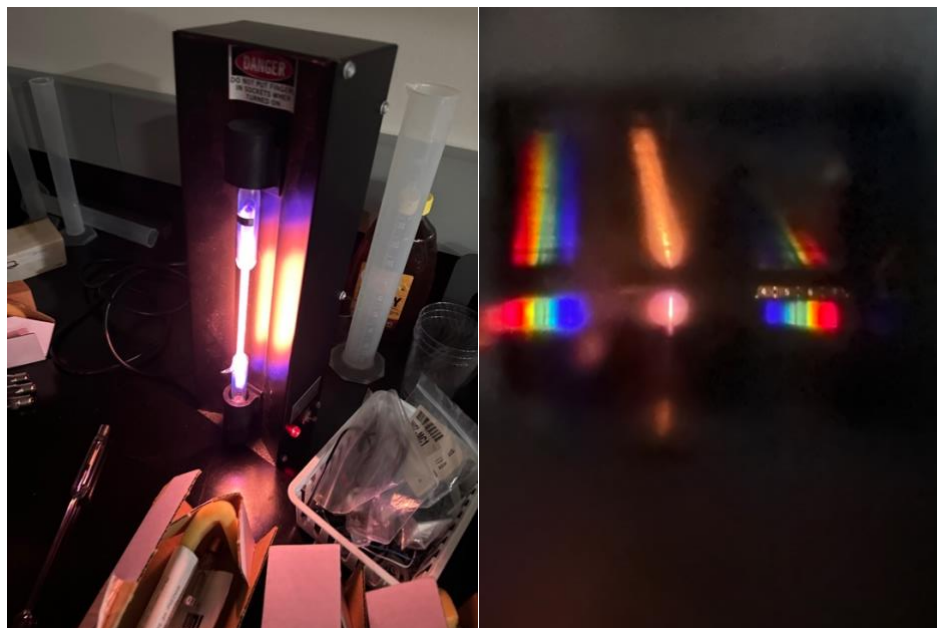
Mercury (Silver-White):



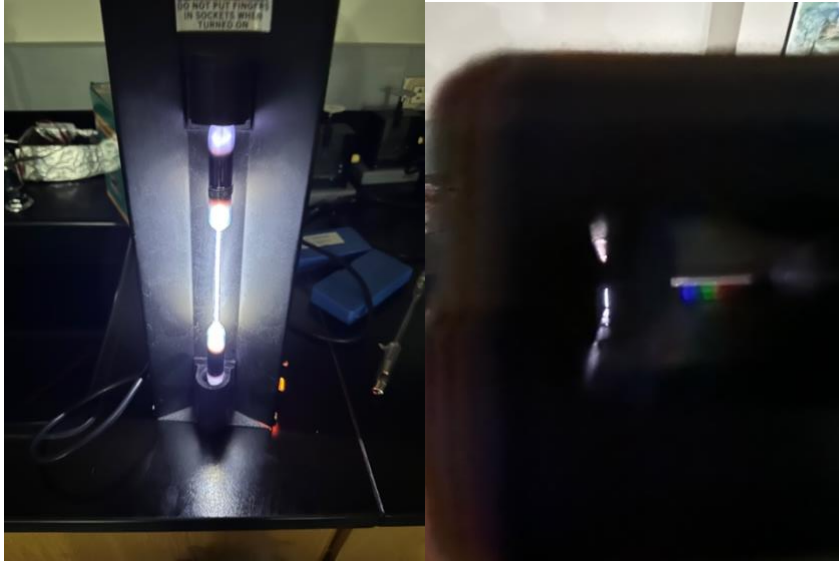
Helium



Hydrogen (Red & Purple, also including some invisible light like ultraviolet and infrared)



Iodine Vapor:



Oxygen:



Argon (Faint Bluish Purple):

